MIS03# 01069	.5 or 1.0 credits	World Agriculture Science & Technology	
Agriculture, Food, and Natural Resources (AG)	**CCTC Cluster**	**CCTC Pathway**	**Career Ready Practice**
Analyze how issues, trends, technologies, and public policies impact systems in the AFNR Career Cluster	AG.1		
Evaluate the nature and scope of the AFNR Career Cluster and the role of AFNR in society and the economy.	AG.2		
Examine and summarize the importance of health, safety, and environmental management systems in AFNR businesses.	AG.3		
Demonstrate stewardship of natural resources in AFNR activities.	AG.4		
Describe career opportunities and means to achieve those opportunities in each of the AFNR Career Pathways.	AG.5		
Analyze the interaction among AFNR systems in the production, processing, and management of food, fiber, and fuel and the sustainable use of natural resources.	AG.6		
Agribusiness Systems		**AG-BIZ**	
Apply management planning principles in AFNR businesses.		AG-BIZ.1	
Use record keeping to accomplish AFNR business objectives, manage budgets, and comply with laws and regulations.		AG-BIZ.2	
Manage cash budgets, credit budgets, and credit for an AFNR business using generally accepted accounting principles.		AG-BIZ.3	
Develop a business plan for an AFNR business.		AG-BIZ.4	
Use sales and marketing principles to accomplish AFNR business objectives.		AG-BIZ.5	

Animal Systems		**AG-ANI**	
Analyze historic and current trends impacting the animal systems industry.		AG-ANI.1	
Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.		AG-ANI.2	
Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction, and/or economic production.		AG-ANI.3	
Apply principles of animal reproduction to achieve desired outcomes for performance, development, and/or economic production.		AG-ANI.4	
Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.		AG-ANI.5	
Classify, evaluate, and select animals based on anatomical and physiological characteristics.		AG-ANI.6	
Apply principles of effective animal health care.		AG-ANI.7	
Environmental Service Systems		**AG-ENV**	
Use analytical procedures and instruments to manage environmental service systems.		AG-ENV.1	
Evaluate the impact of public policies and regulations on environmental service system operations		AG-ENV.2	
Develop proposed solutions to environmental issues, problems, and applications using scientific principles of meteorology, soil science, hydrology, microbiology, chemistry, and ecology.		AG-ENV.3	
Demonstrate the operation of environmental service systems (e.g. pollution control, water treatment, wastewater treatment, solid waste management, and energy conservation.)		AG-ENV.4	
Use tools, equipment, machinery, and technology common to tasks in environmental service systems.		AG-ENV.5	
Food Products & Processing Systems		**AG-FD**	
Develop and implement procedures and instruments to manage environmental service systems.		AG-FD.1	
Apply principles of nutrition, biology, microbiology, chemistry, and human behavior to the development of food products.		AG-FD.2	
Select and process food products for storage, distribution, and consumption.		AG-FD.3	
Explain the scope of the food industry and the historical and current developments of food products and processing.		AG-FD.4	

Natural Resources Systems		**AG-NR**	
Plan and conduct natural resource management activities that apply logical, reasoned, and scientifically based solutions to natural resource issues and goals.		AG-NR.1	
Analyze the interrelationships between natural resources and humans.		AG-NR.2	
Develop plans to ensure sustainable production and processing of natural resources.		AG-NR.3	
Demonstrate responsible management procedures and techniques to protect or maintain natural resources.		AG-NR.4	
Plant Systems		**AG.PL**	
Develop and implement a crop management plan for a given production goal that accounts for environmental factors.		AG-PL.1	
Apply the principles of classification, plant anatomy, and plant physiology to plant production and management.		AG-PL.2	
Propagate, culture, and harvest plants and plant products based on current industry standards.		AG-PL.3	
Apply principles of design in plant systems to enhance an environment (e.g., floral, forest, landscape, and farm).		AG-PL.4	
Power, Structural, & Technical Systems		**AG-PST**	
Apply physical science principles and engineering applications to solve problems and improve performance in AFNR power, structural, and technical systems.		AG.PST.1	
Operate and maintain AFNR mechanical equipment and power systems.		AG.PST.2	
Service and repair AFNR mechanical equipment and power systems.		AG.PST.3	
Plan, build, and maintain AFNR structures.		AG.PST.4	
Use control, monitoring, geospatial, and other technologies in AFNR power, structural, and technical systems.		AG.PST.5	

FFA - Career Ready Practices			
Act as a responsible and contributing citizen and employee.			CRP.1
Apply appropriate academic and technical skills.			CRP.2
Attend to personal health and financial well-being.			CRP.3
Communicate clearly, effectively, and with reason.			CRP.4
Consider the environmental, social, and economic impacts of decisions.			CRP.5
Demonstrate creativity and innovation.			CRP.6
Employ valid and reliable research strategies.			CRP.7
Utilize critical thinking to make sense of problems and persevere in solving them.			CRP.8
Model integrity, ethical leadership, and effective management.			CRP.9
Plan education and career path aligned to personal goals.			CRP.10
Use technology to enhance productivity.			CRP.11
Work productively in teams while using cultural/global competence.			CRP.12
Supervised Agricultural Experience - Career Ready Practices			
Act as a responsible and contributing citizen and employee.			CRP.1
Apply appropriate academic and technical skills.			CRP.2
Attend to personal health and financial well-being.			CRP.3
Communicate clearly, effectively, and with reason.			CRP.4
Consider the environmental, social, and economic impacts of decisions.			CRP.5
Demonstrate creativity and innovation.			CRP.6
Employ valid and reliable research strategies.			CRP.7
Utilize critical thinking to make sense of problems and persevere in solving them.			CRP.8
Model integrity, ethical leadership, and effective management.			CRP.9
Plan education and career path aligned to personal goals.			CRP.10
Use technology to enhance productivity.			CRP.11
Work productively in teams while using cultural/global competence.			CRP.12